1944

ANNALS OF MATHEMATICS

(FOUNDED BY ORMOND STONE)

EDITED BY

SOLOMON LEFSCHETZ JOHN VON NEUMANN

FRÉDÉRIC BOHNENBLUST

WITH THE COÖPERATION OF THE

DEPARTMENT OF MATHEMATICS OF PRINCETON UNIVERSITY

AND

THE SCHOOL OF MATHEMATICS OF THE INSTITUTE FOR ADVANCED STUDY

AND

A. A. ALBERT	T. H. HILDEBRANDT[2]	ANNA PELL-WHEELER[1]
EMIL ARTIN	NATHAN JACOBSON	HASSLER WHITNEY[2]
GARRETT BIRKHOFF	N. E. STEENROD	G. T. WHYBURN[2]
M. R. HESTENES[1]	M. H. STONE	OSCAR ZARISKI

([1] Representing the MATHEMATICAL ASSOCIATION OF AMERICA)
([2] Representing the AMERICAN MATHEMATICAL SOCIETY)

SECOND SERIES, VOL. 45

PUBLISHED QUARTERLY
AT
MOUNT ROYAL AND GUILFORD AVENUES
BALTIMORE 2, MD.
BY THE
PRINCETON UNIVERSITY PRESS
PRINCETON, N. J.

COPYRIGHT, 1944, BY PRINCETON UNIVERSITY PRESS

QA1
A58
II.45

ELH

INDEX

ALBERT, A. A. Quasiquaternion Albegras 623
ARNOLD, B. H. Rings of operators on vector spaces 24
BARGMANN, V., AND EINSTEIN A. Bivector fields 1
BOCHNER, S. Boundary values of analytic functions in several variables and of almost periodic functions 708
BOCHNER, S. Group invariance of Cauchy's formula in several variables 686
BRENNER, J. The linear homogeneous group. II 100
CAIRNS, S. S. Isotopic deformations of geodesic complexes on the 2-sphere and on the plane 207
CAIRNS, S. S. Introduction of a Riemannian geometry on a triangulable 4-manifold 218
CAMERON, R. H., AND MARTIN, W. T. Transformations of Wiener integrals under translations 386
CHERN, S. A simple intrinsic proof of the Gauss-Bonnet formula for closed Riemannian manifolds 747
DAY, M. M. Uniform convexity in factor and conjugate spaces 375
DILWORTH, R. P., AND HALL, M. The imbedding problem for modular lattices 450
EILENBERG, S. Singular homology theory 407
EINSTEIN, A. Bivector fields II 15
EINSTEIN, A., AND BARGMANN, V. Bivector fields 1
ERDÖS, P. On the maximum of the fundamental functions of the ultraspherical polynomials 335
FICKEN, F. A. Note on the existence of scalar products in normed linear spaces 362
GARABEDIAN, H. L. The analogue of Bromwich's theorem for integral transformations 740
HALL, M., AND DILWORTH, R. P. The imbedding problem for modular lattices 450
HALMOS, P. R. In general a measure preserving transformation is mixing 786
HAMBURGER, H. L. Contributions to the theory of closed Hermitian transformations of deficiency index (m, m) 59
HUREWICZ, W. Ergodic theorem without invariant measure 192
HURWITZ, S. On a class of functions suggested by the Zeta of Riemann 340
JACOBSON, N. Construction of central simple associative algebras 658
KAKUTANI, S., AND MACKEY, G. W. Two characterizations of real Hilbert space 50
KOLCHIN, E. R. Extensions of differential fields, II 358
LEVINSON, N. Transformation theory of non-linear differential equations of the second order 723

LOOMIS, L. H. The intrinsic measure theory of Riemannian and Euclidean metric spaces 367
MACKEY, G. W., AND KAKUTANI, S. Two characterizations of real Hilbert space 50
MARTIN, W. T., AND CAMERON, R. H. Transformations of Wiener integrals under translations 386
MCKINSEY, J. C. C., AND TARSKI, A. The algebra of topology 141
MORAN, P. A. P. Measuring the surface area of a convex body 793
NATANSON, I. P. On the convergence of trigonometrical interpolation at equi-distant knots 457
POLLARD, H. Completeness theorems of Paley-Wiener type 738
ROTHBERGER, F. On families of real functions with a denumerable base .. 397
SAMELSON, H. Remark on a paper by R. H. Fox 448
SHIFFMAN, M. Instability for double integral problems in the calculus of variations 543
SIEGEL, C. L. On the theory of indefinite quadratic forms 577
SIEGEL, C. L. The average measure of quadratic forms with given determinant and signature 667
SILVERMAN, L. L., AND SZASZ, O. On a class of Nörlund matrices 347
STEENROD, N. E. The classification of sphere bundles 294
SZASZ, O., AND SILVERMAN, L. L. On a class of Nörlund matrices 347
TARSKI, A., AND MCKINSEY, J. C. C. The algebra of topology 141
THRALL, R. M. On the decomposition of modular tensors (II) 639
TUAN, HSIO-FU. On groups whose orders contain a prime number to the first power 110
WILKINS, J. E., JR. Multiple integral problems in parametric form in the calculus of variations 312
WHITNEY, H. The self-intersections of a smooth n-manifold in $2n$-space .. 220
WHITNEY, H. The singularities of a smooth n-manifold in $(2n-1)$-space . 247
YOUNGS, J. W. T. The topological theory of Fréchet surfaces 753
ZARISKI, O. Reduction of the singularities of algebraic three dimensional varieties 472